CITY OF MILPITAS

EFFECTIVE: February1995

REVISED:

11/04

EEOC: FLSA: Skilled Craft Nonexempt

UNIT:

MEA/Skilled Craft

PHYSICAL: 2

WATER SYSTEM OPERATOR

DEFINITION

Under general supervision, this position will perform a variety of journey level duties associated with the operation, maintenance, and repair of the City's water system; performs related work as required. The Water System Operator's work schedule may include weekend work, and as necessary emergency call outs.

DISTINGUISHING CHARACTERISTICS

This is a lead position responsible for all proper functioning of the systems controlling the treatment, flow, pressure, and volume of water within the City's water distribution system at all times. The Water System Operator is required to have a complete working knowledge of water system operations and related facilities.

SUPERVISION RECEIVED AND EXERCISED

- Receives general supervision from assigned Maintenance Supervisor.
- Exercises indirect supervision over assigned personnel.

EXAMPLES OF DUTIES - Duties may include, but are not limited to, the following:

Assists in the oversight of the administrative aspects of operating the water systems, including review and update of operations procedure manuals.

Perform preventive maintenance on all equipment, machinery, and control systems related to the City's water system.

Install and make minor repairs, modifications or additions to system facilities. Participate in major system repairs.

Maintain and control water treatment facilities in the City's water system.

Provide direction, guidance, and training to less experienced personnel.

CITY OF MILPITAS Water Systems Operator

Monitors and controls the water supply, distribution, and storage systems through a supervisory control and data acquisition systems (SCADA), and analyzes and acts accordingly to control flow through various distribution facilities.

Performs a variety of tests to determine system process performance and compliance with water quality regulations.

Collects various water samples for laboratory analysis and perform water quality analysis tests as assigned.

Read and interpret gauges and recording devices.

Performs and maintains records and report functions as a log of system operations, test results, maintenance work performed, and unusual operating conditions.

Maintains the system and operating equipment and facilities in a clean and orderly condition.

Sanitize storage structure as necessary.

Guide and explain operations to visiting groups.

Operate, exercise, repair, or replace water valves.

Install, repair, or replace fire hydrants, water meters, backflow devices, water main and service lines.

Flush water distribution system.

Respond to water quality complaints.

Maintain records of system performance, maintenance, and repairs.

Disinfect water mains and service lines after pressure reductions to 5 psi or below.

Ensure that safety measures and practices are utilized at all times.

Operate pump stations through SCADA (Supervisory Control and Data Acquisition) control systems as well as local control switches.

Record and interpret flow, pressure, and level gauges and recording devices.

Perform preventative maintenance and repairs on all pump station related equipment.

Troubleshoot mechanical and electrical pump station equipment.

CITY OF MILPITAS
Water Systems Operator

Inspect reservoirs and wells for damage.

Routinely inspect vents, inlet/outlet structures, and entry hatches structures.

Monitor and record water quality to insure that all state and federal mandates are in compliance Treat drinking water to maintain chlorine residual.

Insure that adequate system pressure is maintained through proper adjustment, maintenance, and repair of PRVs (Pressure Reduction Valves).

Collect and analyze water samples.

Performs a variety of tests to determine system process performance and compliance with water quality regulations.

Assist in the oversight of the administrative aspects of operating the water system, including review and update of operation procedure manuals.

Ensure that safety measures and practices are utilized at all times.

Perform emergency maintenance work as required.

Respond to after hour calls.

Performs related duties as assigned.

QUALIFICATIONS

Knowledge of:

Operating principles of water system treatment and distribution operations.

Methods, materials, and equipment used in the operation and maintenance of water system facilities.

SCADA systems.

Standards and procedures pertaining to maintaining an adequate potable and non-potable water supply.

Techniques and procedures for maintaining and performing repairs on electrical control systems, mechanical control systems, hydraulic control valves, pump control valves, and related instruments.

Training and communication techniques; and accepted safety practices.

Ability to:

Learn and receive advanced operational and technological developments in the water industry.

Maintain knowledge of the advancement of the distribution and treatment of water.

Identify water system maintenance and repair problems.

Work independently and exercise sound independent judgment.

Safely operate, repair and maintain water system facilities.

Keep accurate records of water system operations.

Demonstrate aptitude in practical mathematics.

Perform simple water quality tests.

Demonstrate aptitude in practical mathematics.

Demonstrate and understanding of basic water system hydraulics.

Demonstrate mechanical aptitude.

Understand and carry out oral and written instructions.

Give clear oral and written instructions.

Establish and maintain cooperative relationships with City staff and the public.

EXPERIENCE AND EDUCATION

Experience:

Three years of increasingly responsible experience in the operation, maintenance, and repair of water system facilities.

Education:

Equivalent to the completion of the twelfth grade.

License or Certificate

Possession of or ability to obtain and maintain a valid California Commercial Driver's License with Class A endorsements as assigned.

Possession of a Grade III Water Treatment Operator Certificate issued by the California Department of Health Services.

Possession of a Grade D5 Water Distribution Certificate issued by the California Department of Health Services.

Special Requirements: Essential duties require the following physical abilities and work environment:

Physical exam, and drug and alcohol screening.

Visual Requirements: Discern colors

Auditory Requirements: 100-decibel hearing

Work is mainly performed outdoors; Ability to stand, walk, sit, climb, balance, squat, kneel, crawl, bend, and stoop at any given time; able to lift, carry, push, and pull up to 75 pounds of weight throughout the day and occasionally up to 90 pounds; exposure to outdoor elements in all weather conditions throughout the year, confined spaces, hazardous waste, sewage, chemicals, herbicides and pesticides; walk on uneven surfaces; able to travel to various locations within and outside the City of Milpitas.

City Manager

Human Resources Director